



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/080,300	02/21/2002	Holger Warth	Mo6879/LeA 33,977	8773
157	7590	08/12/2004	EXAMINER	
BAYER MATERIAL SCIENCE LLC 100 BAYER ROAD PITTSBURGH, PA 15205			CHANG, VICTOR S	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 08/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/080,300		WARTH ET AL.	
	Examiner		Art Unit	
	Victor S Chang		1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-24,26 and 27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-24,26 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In view of the Appeal Brief filed on 6/3/2004, PROSECUTION IS HEREBY REOPENED. New grounds of rejections are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Rejections not maintained are withdrawn. In particular, upon reconsideration, Applicants' argument "Reihs et al and Padwa et al, either alone or in combination, do not disclose, teach or suggest the multi-layered composite of Appellants' present claims which includes a polycarbonate composition containing 1 to 3 percent by weight of (C) a copolymer of styrene and at least one monomer containing at least one carboxyl group ..." (Appeal Brief, page 7, second full paragraph) is persuasive. As such the rejection under 35 USC 102(b) in section 4 of Office action dated 1/7/2004 is withdrawn.

Art Unit: 1771

However, Applicants' argument is moot in view of the new grounds of rejection as follows.

Response to Amendment

4. Claims 1, 2, 4-14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Fuhr et al. (US 5272193).

Fuhr's invention is directed to thermoplastic polycarbonate molding compounds containing (A) 40 to 90 pbw (parts by weight) of a thermoplastic aromatic polycarbonate; (B) 0 to 80 pbw of a copolymer or polycondensate consisting of 0 to 50 pbw of a thermoplastic copolymer of 50 to 95% by weight of styrene, α -methylstyrene, styrene alkylated in the nucleus, halogenated styrene or mixtures thereof and 5 to 50% by weight of acrylonitrile, methacrylonitrile, alkyl acrylate, alkyl methacrylate, maleic acid anhydride, N-substituted maleimide, vinyl acetate or mixtures thereof and/or 0 to 80 pbw of a thermoplastic polyalkylene terephthalate; and (C) 1 to 25 pbw of a graft polymer prepared from 5 to 90 pbw of a mixture of: 50 to 95% by weight of styrene, α -methylstyrene, halogenated styrene, styrene alkylated in the nucleus, methyl methacrylate or mixtures thereof and 5 to 50% by weight of (meth)acrylonitrile, methyl methacrylate, maleic acid anhydride, N-substituted maleimide or mixtures thereof on 10 to 95 pbw of a rubber having a glass temperature being equal or lower than 10° C; (D) 1 to 30 pbw of phosphoric acid esters of phenols, bisphenols and/or polyphenols; (E) and 0.05 to 5 pbw of aromatic polyamides or polyimidamides (aramides) anti-dripping agent in the form of fibers or powders or deposited on carriers. The total weight of the above

Art Unit: 1771

amounts to 100 pbw (Abstract). Additionally, Fuhr teaches that the preferably M_w of his component (B) is from 15,000 to 200,000 (column 6, lines 30-35).

For claims 1-11, Fuhr's components (A), (B) and (C) read on each element of the instantly claimed components (A), (C) and (B), respectively.

For claims 12 and 13, Fuhr's component (B) also reads on instantly claimed component (D), as set forth above.

For claim 14, Fuhr teaches that the thermoplastic molding compounds optionally contains stabilizers, pigments, fillers, antistatic agents, metal compounds and flame protective agents (flame-retardants), etc. (column 13, lines 3-6).

For claim 16, Fuhr shows that the components are mixed in a conventional Banbury internal kneader at 230° to 240°C, and extruded at 260°C to form test samples (column 15, lines 3-5).

Claims lack novelty.

5. Claims 15, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuhr et al. (US 5272193) in view of Witman et al. (US 4603170).

The teachings of Fuhr is again relied upon as set forth above.

For claim 15, Fuhr teaches that the molding compounds optionally contains pigments, fillers, etc., as set forth above. Although Fuhr lacks express teachings of the compositions of the pigments and fillers, it is noted that Witman's invention is also directed to a thermoplastic polycarbonate molding compound (Abstract), and Witman expressly teaches that mica, silicates, quartz, talcum, titanium dioxide and wollastonite, etc., are preferred fillers which may also have a reinforcing action (column 6, lines 59-

Art Unit: 1771

66). As such, it would have been obvious to one of ordinary skill in the art to modify Fuhr's molding compounds with fillers Witman's fillers, motivated by the desire to obtain a reinforcing action.

For claims 17 and 18, Fuhr teaches that the molding compound is worked up into a granulate (column 15, lines 4-8), which is extruded to form test samples. Further, Witman also teaches that the product is worked-up in an injection molding machine at a mass temperature of 270°C (column 8, lines 13-14). As such, it would have been obvious to one of ordinary skill in the art to form a molded article from Fuhr's molding compounds, as taught by Witman, motivated by the desire to form suitable test samples.

6. Claims 19-22, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reihs et al. (US 6296908) in view of Fuhr et al. (US 5272193).

The teachings of Fuhr are again relied upon as set forth above.

For claims 19-22, Reihs' invention is directed to composite materials made of at least one composite layer of a polyurethane and of a second composite layer which is directly bonded to the first layer and which consists of a thermoplastic material (Abstract). The polyurethane layer may be foamed or in solid form (column 4, lines 47-48). Reihs also expressly teaches that all the known thermoplastics, including polycarbonate, etc., are suitable for use as thermoplastic plastic materials for layer B (column 7, lines 6-14). As such, it would have been obvious to one skilled in the art to incorporate Fuhr's thermoplastic polycarbonate compounds into the composites of Reihs, motivated by the desire to obtain a composite materials. It should be noted that

the selection of a known material based on its suitability for its intended use supported a *prima facie* obviousness determination. See MPEP § 2144.07.

7. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Reihs et al. (US 6296908) in view of Fuhr et al. (US 5272193), and further in view of JP 07-268207 (Abstract).

The teachings of Reihs and Fuhr are again relied upon as set forth above.

For claims 23 and 24, Reihs and Fuhr lack an express teaching that the composite further comprises an polyvinyl chloride (PVC) layer. However, it is noted that JP '207 teaches a laminate of PVC and polyurethane which provides excellent heat and light resistances (Abstract). As such, it would have been obvious to one of ordinary skill in the art of automotive laminate to incorporate a layer of polyvinyl chloride to the outer surface of the polyurethane layer of Reihs' composite, motivated by the desire to obtain a composite with improved heat and light resistances.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 571-272-1474. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1771

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VSC
Victor S Chang
Examiner
Art Unit 1771

8/4/2004


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700